is safe to move the equipment in passenger service; and

(3) A record is maintained of the noncomplying condition with the date and time that the condition was first discovered.

(e) A long-distance intercity passenger train that misses a scheduled calendar day interior mechanical inspection due to a delay en route may continue in service to the location where the inspection was scheduled to be performed. At that point, an interior calendar day mechanical inspection shall be performed prior to returning the equipment to service.

(f) *Records.* A record shall be maintained of each interior calendar day mechanical inspection performed.

(1) This record may be maintained in writing or electronically provided FRA has access to the record upon request.

(2) The written or electronic record must contain the following information:

(i) The identification number of the unit;

(ii) The place, date, and time of the inspection;

(iii) Any non-complying conditions found; and

(iv) The signature or electronic identification of the inspector.

(3) This record may be part of a single master report covering an entire group of cars and equipment.

(4) This record shall be maintained at the place where the inspection is conducted or at one central location and shall be retained for at least 92 days.

[64 FR 25660, May 12, 1999, as amended at 65 FR 41308, July 3, 2000; 73 FR 6412, Feb. 1, 2008]

### § 238.307 Periodic mechanical inspection of passenger cars and unpowered vehicles used in passenger trains.

(a) *General.* (1) Railroads shall conduct periodic mechanical inspections of all passenger cars and all unpowered vehicles used in a passenger train as required by this section or as warranted and justified by data developed pursuant to paragraph (a)(2) of this section. A periodic inspection conducted under part 229 of this chapter satisfies the requirement of this section with respect to the features inspected.

(2) A railroad may, upon written notification to FRA's Associate Administrator for Safety, adopt and comply with alternative periodic mechanical inspection intervals for specific components or equipment in lieu of the requirements of this section. Any alternative interval must be based upon a documented reliability assessment conducted under a system safety plan subject to periodic peer audit. (See Appendix E to this part for a discussion of the general principles of reliability-based maintenance programs.) The periodic inspection intervals provided in this section may be changed only when justified by accumulated, verifiable data that provides a high level of confidence that the component(s) will not fail in a manner resulting in harm to persons. FRA may monitor and review a railroad's implementation and compliance with any alternative interval adopted. FRA's Associate Administrator for Safety may prohibit or revoke a railroad's ability to utilize an alternative inspection interval if FRA determines that the adopted interval is not supported by credible data or does not provide adequate safety assurances. Such a determination will be made in writing and will state the basis for such action.

(b) Each periodic mechanical inspection required by this section shall be performed by a qualified maintenance person.

(c) The periodic mechanical inspection shall specifically include the following interior and exterior mechanical components, which shall be inspected not less frequently than every 184 days. At a minimum, this inspection shall determine that:

(1) Seats and seat attachments are not broken or loose. If a car is found with a seat that is not in compliance with this requirement while being used between periodic mechanical inspections, the equipment may continue to be used in passenger service until the performance of an interior calendar day mechanical inspection pursuant to § 238.305 on the day following the discovery of the defective condition provided the seat is rendered unuseable, a notice is prominently displayed on the seat, and a record is maintained with

the date and time that the non-complying condition was discovered.

(2) Luggage racks are not broken or loose.

(3) All beds and bunks are not broken or loose, and all restraints or safety latches and straps are in place and function as intended.

(4) A representative sample of emergency window exits on the railroad's passenger cars properly operate, in accordance with the requirements of §239.107 of this chapter.

(5) With regard to the following emergency systems:

(i) Emergency lighting systems required under §238.115 are in place and operational; and

(ii) [Reserved]

(6) With regard to switches:

(i) All hand-operated switches carrying currents with a potential of more than 150 volts that may be operated while under load are covered and are operative from the outside of the cover;

(ii) A means is provided to display whether the switches are open or closed; and

(iii) Switches not designed to be operated safely while under load are legibly marked with the voltage carried and the words ''must not be operated under load''.

(7) Each coupler is in the following condition:

(i) The distance between the guard arm and the knuckle nose is not more than 5⅛ inches on standard type couplers (MCB contour 1904), or not more than 5$^{5}/_{16}$ inches on D&E couplers;

(ii) The free slack in the coupler or drawbar not absorbed by friction devices or draft gears is not more than ½ inch; and

(iii) The draft gear is not broken, to the extent possible without dropping cover plates.

(8) All trucks are equipped with a device or securing arrangement to prevent the truck and car body from separating in case of derailment.

(9) All center castings on trucks are not cracked or broken, to the extent possible without jacking the car and rolling out the trucks. However, an extensive inspection of all center castings shall be conducted by jacking the equipment and rolling out the trucks at each COT&S cycle provided in §238.309 for the equipment.

(10) All mechanical systems and components of the equipment are free of all the following general conditions that endanger the safety of the crew, passengers, or equipment:

(i) A continuous accumulation of oil or grease;

(ii) Improper functioning of a component;

(iii) A crack, break, excessive wear, structural defect, or weakness of a component;

(iv) A leak;

(v) Use of a component or system under a condition that exceeds that for which the component or system is designed to operate; and

(vi) Insecure attachment of a component.

(11) All of the items identified in the exterior calendar day mechanical inspection contained at §238.303 are in conformity with the conditions prescribed in that section.

(12) All of the items identified in the interior calendar day mechanical inspection contained at §238.305 are in conformity with the conditions prescribed in that section.

(13) The hand or parking brake shall be applied and released to determine that it functions as intended.

(d) At an interval not to exceed 368 days, the periodic mechanical inspection shall specifically include inspection of the following:

(1) Manual door releases, to determine that all manual door releases operate as intended;

(2) The hand or parking brake as well as its parts and connections, to determine that they are in proper condition and operate as intended. The date of the last inspection shall be either entered on Form FRA F 6180–49A, suitably stenciled or tagged on the equipment, or maintained electronically provided FRA has access to the record upon request; and

(3) Emergency roof access markings and instructions required under §238.123(e), to determine that they are in place and, as applicable, conspicuous or legible, or both.

(e) *Records.* (1) A record shall be maintained of each periodic mechanical inspection required to be performed by this section. This record may be maintained in writing or electronically, provided FRA has access to the record upon request. The record shall be maintained either in the railroad's files, the cab of the locomotive, or a designated location in the passenger car. The record shall be retained until the next periodic mechanical inspection of the same type is performed and shall contain the following information:

(i) The date of the inspection;

(ii) The location where the inspection was performed;

(iii) The signature or electronic identification of the inspector; and

(iv) The signature or electronic identification of the inspector's supervisor.

(2) Detailed documentation of any reliability assessments depended upon for implementing an alternative inspection interval under paragraph (a)(2) of this section, including underlying data, shall be retained during the period that the alternative inspection interval is in effect. Data documenting inspections, tests, component replacement and renewals, and failures shall be retained for not less than three (3) inspection intervals.

(f) Nonconformity with any of the conditions set forth in this section renders the car or vehicle defective whenever discovered in service.

[64 FR 25660, May 12, 1999, as amended at 65 FR 41308, July 3, 2000; 71 FR 61862, Oct. 19, 2006; 73 FR 6412, Feb. 1, 2008]

### § 238.309 Periodic brake equipment maintenance.

(a) *General.* (1) This section contains the minimum intervals at which the brake equipment on various types of passenger equipment shall be periodically cleaned, repaired, and tested. This maintenance procedure requires that all of the equipment's brake system pneumatic components that contain moving parts and are sealed against air leaks be removed from the equipment, disassembled, cleaned, and lubricated and that the parts that can deteriorate with age be replaced.

(2) A railroad may petition FRA's Associate Administrator for Safety to approve alternative maintenance procedures providing equivalent safety, in lieu of the requirements of this section. The petition shall be filed as provided in § 238.21.

(b) *MU locomotives.* The brake equipment of each MU locomotive shall be cleaned, repaired, and tested at intervals in accordance with the following schedule:

(1) Every 736 days if the MU locomotive is part of a fleet that is not 100 percent equipped with air dryers;

(2) Every 1,104 days if the MU locomotive is part of a fleet that is 100 percent equipped with air dryers and is equipped with PS–68, 26–C, 26–L, PS–90, CS–1, RT–2, RT–5A, GRB–1, CS–2, or 26–R brake systems. (This listing of brake system types is intended to subsume all brake systems using 26 type, ABD, or ABDW control valves and PS68, PS–90, 26B–1, 26C, 26CE, 26–B1, 30CDW, or 30ECDW engineer's brake valves.); and

(3) Every 736 days for all other MU locomotives.

(c) *Conventional locomotives.* The brake equipment of each conventional locomotive shall be cleaned, repaired, and tested at intervals in accordance with the following schedule:

(1) Every 1,104 days for a locomotive equipped with a 26–L or equivalent brake system; and

(2) Every 736 days for a locomotive equipped with other than a 26–L or equivalent brake system.

(d) *Passenger coaches and other unpowered vehicles.* The brake equipment on each passenger coach and each unpowered vehicle used in a passenger train shall be cleaned, repaired, and tested at intervals in accordance with following schedule:

(1) Every 2,208 days for a coach or vehicle equipped with an AB-type brake system.

(2) Every 1,476 days for a coach or vehicle equipped with a 26–C or equivalent brake system; and

(3) Every 1,104 days for a coach or vehicle equipped with other than an AB, ABD, ABDX, 26–C, or equivalent brake system.

(e) *Cab cars.* The brake equipment of each cab car shall be cleaned, repaired, and tested at intervals in accordance with the following schedule: